

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211 $\frac{R08-}{(Rulemaking - Air)}MAY 0 9 2008$

STATE OF ILLINOIS Pollution Control Board

RECEIVED

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- 9. Attachments to Technical Support Document (See Attachment A to Motion for Waiver of Copy Requirements)
- 10. Incorporations by Reference
- 11. Certificate of Service
- 12. Disk in Microsoft WORD containing Proposed Amendments to Parts 211 and 217 (RULE-211.doc and RULE-217.doc)

CLERK'S OFFICE

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MAY 0 9 2008

STATE OF ILLINOIS BEFORE THE ILLINOIS POLLUTION CONTROPOLATION Board

IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211 R08- 19 (Rulemaking – Air)

NOTICE

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TO: John Therriault Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601-3218

> Virginia Yang Deputy Counsel Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702

Matthew Dunn Chief Division of Environmental Enforcement Office of the Attorney General 69 W. Washington St., Suite 1800 Chicago, IL 60602

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois

Pollution Control Board the RULEMAKING PROPOSAL entitled "AMENDMENTS TO 35 ILL.

ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211," MOTION

FOR WAIVER OF COPY REQUIREMENTS, AND APPEARANCES of the Illinois Environmental

Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

Gina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 North Grand Avenue East P. O. Box 19276 Springfield, IL 62794-9276 217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER



RECEIVED CLERK'S OFFICE

MAY 0 9 2008

STATE OF ILLINOIS BEFORE THE ILLINOIS POLLUTION CONTROL BOARDPollution Control Board

IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211

R08-(Rulemaking – Air)

APPEARANCE

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The undersigned hereby enters her appearance as an attorney on behalf of the

Illinois Environmental Protection Agency.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL **PROTECTION AGENCY**

Abent By:

Gina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD MAY 0.9 2008

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IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211 STATE OF ILLINOIS Pollution Control Board R08- 19 (Rulemaking – Air)

APPEARANCE

The undersigned hereby enters her appearance as an attorney on behalf of the

Illinois Environmental Protection Agency.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By

Dana Vetterhoffer Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211 MAY 0 9 2008 R08- 19 STATE OF ILLINOIS (Rulemaking - Alph Control Board

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PROPOSAL OF REGULATIONS

The Illinois Environmental Protection Agency moves that the Illinois Pollution Control

Board adopt the attached regulations.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

Douglas P.)Scott Director

DATED: May 8, 2008

1021 North Grand Avenue East P. O. Box 19276 Springfield, IL 62794-9276 217/782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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R08- 19

(Rulemaking – Air)

IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211

CERTIFICATION OF ORIGINATION

NOW COMES the Illinois Environmental Protection Agency to certify in accordance

with 35 Ill. Adm. Code 102.202(i) that this proposal for amendments to 35 Ill. Adm. Code 217

and 211 amends the most recent version of the rules as published on the Illinois Pollution

Control Board's Web site.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: ^C

Gina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 North Grand Avenue East PO Box 19276 Springfield, IL 62794-9276 217/782-5544 CLERK'S OFFICE

MAY 0 9 2008

STATE OF ILLINOIS

Pollution Control Board

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MAY 0 9 2008 BEFORE THE ILLINOIS POLLUTION CONTROL BOARDE OF ILLINOIS Pollution Control Board

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AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211

R08- 19 (Rulemaking – Air)

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MOTION FOR WAIVER OF COPY REQUIREMENTS

NOW COMES the Proponent, the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), by one of its attorneys, and pursuant to 35 Ill. Adm. Code 101.500 102.110, and 102.200, moves that the Illinois Pollution Control Board ("Board") waive certain requirements, namely that the Illinois EPA submit an entire copy of the proposal to the Attorney General, that the Illinois EPA submit an entire copy of the proposal to the Department of Natural Resources ("DNR"), and that the Illinois EPA submit the original and nine copies of all documents upon which it relied and incorporated by reference. In support of its Motion, the Illinois EPA states as follows:

1. Section 102.200 of the Board's procedural rules requires that the original and nine copies of each regulatory proposal be filed with the Clerk. This entire regulatory proposal consists of over 1,000 pages. Given the length of the proposal and the resources required to provide nine copies, the Illinois EPA requests that it be allowed to file the original and four complete copies of the proposal, plus five partial copies, the partial copies consisting of pleadings and the proposed rule absent documents relied upon and incorporated by reference.

2. Section 102.200 of the Board's procedural rules also requires that one copy be filed with the Attorney General. On May 7, 2008, Mr. Matthew Dunn, Chief of the Environmental Enforcement/Asbestos Litigation Division of the Office of the Attorney General in Chicago, agreed that the Illinois EPA need not supply that office with a copy of the entire proposal, provided that his office is served with a partial copy and any additional information or documents requested after reviewing the proposal.

3. Section 102.200 of the Board's procedural rules requires that one copy be filed with DNR also. On May 7, 2008, Virginia Yang, Deputy Counsel of the DNR in Springfield, agreed that the Illinois EPA need not supply that office with a copy of the entire proposal, provided that her office is served with a partial copy and any additional information or documents requested after reviewing the proposal.

4. Section 27(a) of the Environmental Protection Act ("Act") requires the Illinois EPA to provide information supporting the proposal. 415 ILCS 5/27(a). Accordingly, the Illinois EPA has provided documents that were directly relied upon while drafting the regulatory proposal. The list of documents relied upon is found in Attachment A. The documents listed in Attachment A are quite voluminous. A couple of the documents listed in Attachment A are readily accessible to or are within the possession of the Board. Furthermore, the Illinois EPA has supplied four copies of the documents listed in Attachment A denoted with an asterisk. Given the ease of accessibility of these documents, the Illinois EPA moves that the requirement that it provide copies of items (1) and (2) of Attachment A be waived, and that it supply nine copies of the items of Attachment A denoted with an asterisk also be waived.

5. Section 5-75(a) of the Illinois Administrative Procedure Act ("IAPA") provides, in relevant part, that an agency may incorporate by reference the regulations, standards and guidelines of an agency of the United States or a nationally recognized organization or association without publishing the incorporated material in full. 5 ILCS 100/5-75(a). Further, Section 5-75(b) of the IAPA states, in relevant part, that the agency adopting a rule or regulation under the IAPA shall maintain a copy of the referenced rule, regulation, standard or guideline in

at least one of its principal offices and shall make it available to the public upon request. 5 ILCS 100/5-75(b). In developing this proposed rulemaking, the Illinois EPA has incorporated by reference certain documents. The Illinois EPA requests that it not be required to submit copies of all the documents incorporated by reference in this proposed rulemaking. Such documents are as follows:

- 1. 40 CFR Part 60, Appendix A, Methods 1, 2, 3, and 4 (2007).
- 2.* Alternative Control Techniques Document-- NO_x Emissions from Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994.
- 3.* Alternative Control Techniques Document-- NO_x Emissions from Process Heaters (Revised), EPA-453/R-93-034, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1993.
- 4.* Alternative Control Techniques Document-- NO_x Emissions from Glass Manufacturing, EPA-453/R-94-037, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, June 1994.
- 5.* Alternative Control Techniques Document-- NO_x Emissions from Iron and Steel Mills, EPA-453/R-94-065, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1994.

The Illinois EPA has supplied four copies of the documents denoted with an asterisk.

Given the ease of accessibility of these documents, the Illinois EPA moves that the requirement

that it provide copies of the item without an asterisk and that it supply nine copies of the

documents denoted with an asterisk above be waived. The Illinois EPA's request is consistent

with the Illinois Administrative Procedure Act, 5 ILCS 100/1-1 et seq., and reasonable in light of

the fact that these documents are quite lengthy and are readily available.

WHEREFORE, for the reasons set forth above, the Illinois EPA moves that the Board

waive the requirement that the Illinois EPA file the entire proposal with the Attorney General and DNR and that the Illinois EPA provide the Board with nine copies of the proposal and copies of all documents incorporated by reference and relied upon in the development of the proposal.

> Respectfully submitted, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

Gina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 N. Grand Ave., East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544

Attachment A

- 1. The Clean Air Act, as amended in 1990 (42 U.S.C. § 7401 et seq.).
- 2. Illinois Environmental Protection Act (415 ILCS 5/1 *et seq.*).

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- 3. *Energy & Environmental Analysis, Inc., "Characterization of the U.S. Boiler Industrial Commercial Boiler Population," Submitted to Oak Ridge National Laboratory, May 2005.
- 4. *<u>http://commons.wikimedia.org/wiki/Image:Water_tube_boiler_schematic.png</u>
- 5. *http://en.wikipedia.org/wiki/Image:Locomotive fire tube boiler schematic.png
- 6. *Babcock & Wilcox Company, <u>Steam, It's Generation and Use</u>, 40th Edition, 1992.
- 7. *Neil Johnson, "Fundamentals of Stoker Fired Boiler Design and Operation," Presented at CIBO Emission Controls Technology Conference, July 15-17, 2002.
- 8. *Letter to Mr. Regulator, New Hampshire Division of Environmental Services, from Daniel J. Willems, Product Development, Cleaver Brooks, dated May 19, 2006.
- 9. *<u>http://www1.eere.energy.gov/industry/bestpractices/pdfs/steam4_boiler_efficien</u> cy.pdf
- 10. *<u>http://www.energysolutionscenter.org/boilerburner/Eff_Improve/Efficiency/Oxy</u> gen_Control.asp
- 11. *<u>http://files.asme.org/asmeorg/Codes/CertifAccred/Personnel/2971.pdf</u>
- 12. *<u>http://www.coen.com/i html/white lowcostnoxpm.html</u>
- 13. *Rajani Varagani (n.d.), "A Cost Effective Low NOx Retrofit Technology for Industrial Boilers," Cited within CIBO Industrial Emissions Control Technology III, August 1-3, 2005.
- 14. *Email from Jim Staudt, Andover Technology, to R. Gifford Broderick, Combustion Components Associates, Based on estimate for a 4-burner project, dated October 16, 2003.
- 15. *<u>http://www.johnzink.com/products/burners/html_todd/burn_todd_cs_104.htm</u>

- 16. *Sacramento General Services Heating Plant Case Study: COEN web site: http://www.coen.com/mrktlit/brochures/pdf/qla.pdf
- 17. *Zink, John (2003). "U.S. Borax TODD Ultra Low Emissions Burner Installment."
- 18. *Zink, John (2003). "TODD Ultra Low Emissions Burner Installment."
- 19. *Coen Company, "Ultra Low NOx Gas-Fired Burner with Air Preheat," Final Report, prepared for California Air Resources Board, November 23, 2000.
- 20. *Memorandum from Jim Staudt, Andover Technology Partners to Sikander Khan, United States Environmental Protection Agency, providing comments in response to September 10, 2003 email, dated October 24, 2003.
- 21. *Memorandum from Chad Whiteman, Institute of Clean Air Companies to Christopher Recchia, Ozone Transport Commission, regarding Selective Non-Catalytic Reduction Technology Costs for Industrial Sources, dated October 6, 2006.
- 22. *Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NOx: Control Technologies and Cost Effectiveness for Utility Boilers," prepared by Jim Staudt, Andover Technology Partners, June 1998.
- 23. *Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NOx Controls," prepared by Jim Staudt, Andover Technology Partners, December 2000. ("NESCAUM 2000 report")
- 24. *Institute to Clean Air Companies, Inc., "White Paper: Selective Catalytic Reduction (SCR) Control of NOx Emissions," November 1997.
- 25. *<u>http://www.cormetech.com/experience.htm</u>
- 26. *"Economic Indicators," Chemical Engineering, p. 102, September 2006.
- 27. *Vatatuck, William M., "Updating the CE Plant Cost Index," Chemical Engineering, p. 69, January 2002.
- 28. *State and Territorial Air Pollution (STAPPA) and Association of Local Air Pollution Control Offices (ALAPCO), "Controlling Fine Particulate Matter Under the Clean Air Act: A Menu of Options," March 2006.
- 29. *Erickson, C., and Staudt, J., "Selective Catalytic Reduction System Performance and Reliability Review," presented at the EPRI-EPA-DOE-AWMA Combined Utility Air Pollution Control Conference, the Mega Conference, Baltimore, August 28-31, 2006.

- 30. *Cichanowicz, E.J., "Current Capital Cost and Cost-Effectiveness of Power Plant Emissions Control Technologies," prepared for Utility Air Regulatory Group, June 2007.
- 31. *<u>http://www.mobotecusa.com/projects/vermillion-sellsheet.pdf</u>
- 32. *http://www.mobotecusa.com/projects/capefear6-sellsheet.pdf
- 33. *STAPPA/ALAPCO, "Controlling Nitrogen Oxides under the Clean Air Act: A Menu of Options," July 1994.
- *Khan, Sikander, United States Environmental Protection Agency,
 "Methodology, Assumptions, and References Preliminary NOx Controls Cost Estimates for Industrial Boilers," October-November 2003.
- *MACTEC Federal Programs / MACTEC Engineering and Consulting, Inc.,
 "Midwest Regional Planning Organization (RPO): Petroleum Refinery Best Available Retrofit Technology (BART)," Engineering Analysis, prepared for The Lake Michigan Air Directors Consortium (LADCO), March 30, 2005. ("LADCO 2005")
- 36. *<u>http://www.epa.gov/air/ozonepollution/SIPToolkit/documents/stationary_nox_list.</u> pdf
- 37. *<u>http://www.callidus.com/pages/next_gen.htm</u>
- 38. *Heat Input Affects NOx Emissions from Internal Flue Gas Re-Circulation Burners <u>http://texasiof.ces.utexas.edu/texasshowcase/pdfs/presentations/c1/dbishop.pdf</u>
- 39. *http://www.andovertechnology.com/HGA_Market_Report_secure.pdf
- 40. *<u>http://www.valleyair.org/rules/currntrules/r4304.pdf</u>
- 41. *<u>www.perf.org/ppt/Bishop.ppt</u>
- 42. *State of New Jersey Department of Environmental Protection, State of the Art Manual for Boilers and Process Heaters, July 1997 (revised February 22, 2004). www.state.nj.us/dep/aqpp/downloads/sota/sota12.pdf
- 43. *Partha Ganguli, Workgroup Recommendations and Other Potential Control Measures Stationary Combustion Sources Workgroup, May 11, 2006. <u>http://www.nj.gov/dep/airworkgroups/docs/wps/SCS004A_fin.pdf</u>

- 44. *Sun, W.H., Bisnett, M.J., et al., "Reduction of NOx Emissions from Cement Kiln/Calciner through the Use of the NOxOUT Process," International Specialty Conference on Waste Combustion in Boilers and Industrial Furnaces, April 21, 1994.
- 45. *http://www.cadencerecycling.com/pdf/6-PageComplete.pdf
- 46. *Hansen, E., Cadence Environmental Energy Inc., "Staged Combustion for NOx Reduction Using High Pressure Air Injection," undated. <u>http://www.cadencerecycling.com/pdf/IEEE2002.pdf</u>
- 47. *Sabo, E., MACTEC Federal Programs, Inc., "Candidate Control Measures for Cement Plants", LADCO/MRPO, Regional Air Quality Workshop, June 28, 2005.
- 48. *United States Environmental Protection Agency, Office of Air Quality, Planning and Standards, Technical Bulletin: Nitrogen Oxides (NOx), Why and How They Are Controlled, EPA-456/F-99-006R, November 1999. <u>http://www.epa.gov/ttn/catc/dir1/fnoxdoc.pdf</u>
- 49. *Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, Rule, 63 *Fed. Reg.* 57356, October 27, 1998.
- 50. *State of Michigan v. U.S. Environmental Protection Agency, 213 F.3d 663 (D.C. Cir. 2000)
- 51. *Federal Implementation Plans to Reduce the Regional Transport of Ozone; Proposed Rule, 63 Fed. Reg. 56394, October 21, 1998.
- 52. *United States Environmental Protection Agency, Office of Air and Radiation, Regulatory Impact Analysis for the NOx SIP Call, FIP, and Section 126 Petitions, Volume 1: Costs and Economic Impacts, September 1998.
- 53. *Waible, R., Price, D., Tish, P., Halpern, M., "Advanced Burner Technology for Stringent NOx Regulations," presented at the American Petroleum Institute Midyear Refining Meeting, Orlando, FL, May 8, 1990.
- 54. *Nguyen, Quang, Koppang, Richard, Energy and Environmental Research Corporation, Advanced Steel Reheat Furnaces Research and Development, Final Report, prepared for U.S. Department of Energy, January 14, 1999.
- 55. *Rowlan, Steven J. and Sun, William H., "NOx Control on Preheat and Radiant Furnaces at Nucor Steel Mills through Urea SNCR, SCR, and Hybrid Processes," presented at ICAC Forum, Houston, TX, February 12013, 2002. <u>http://www.icac.com/Files/Rowlan.pdf</u>

- 56. *Kobayashi, H., "Advances in Oxy-Fuel Fired Glass Melting Technology," presented at XX International Congress on Glass (ICG), Kyoto, Japan, September 26- October 1, 2004.
- 57. *http://www1.eere.energy.gov/industry/glass/pdfs/airstaging.pdf
- 58. *<u>http://www.gastechnology.org/webroot/app/xn/xd.aspx?it=enweb&xd=4reportsp</u> ubs%5C4_8focus%5Coxygenenrichedairstaging.xml
- 59. *<u>http://www.osti.gov/energycitations/product.biblio.jsp?osti_id=616314</u>
- 60. *Midwest RPO Candidate Control Measures, Interim White Paper, Source Category: Glass Manufacturing, December 2, 2005.
- 61. *Energetics, Inc., Energy and Environmental Profile of the U.S. Aluminum Industry, prepared for U.S. Department of Energy, July 1997.
- 62. *<u>http://www1.eere.energy.gov/industry/aluminum/pdfs/aluminum.pdf</u>
- 63. *Schalles, David G., The Next Generation of Combustion Technology for Aluminum Melting, undated. http://www.bloomeng.com/tmspaper-FINAL.doc
- 64. *http://www.bloomeng.com/1150lumiflame.pdf
- 65. *<u>http://www.eere.energy.gov/industry/combustion/pdfs/oscllcomb.pdf</u>
- 66. *California South Coast Rule 2002, Allocations for oxides of Nitrogen (NOx) and oxides of Sulfur (Sox), amended January 7, 2005.
- 67. *<u>http://www.epa.gov/ttn/emc/cem.html</u>
- *Alternative Control Techniques Document--NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994.

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

MAY 0 9 2008

IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES EMISSIONS, AND 35 ILL. ADM. CODE 211 R08- Generation Control Board (Rulemaking – Air)

STATEMENT OF REASONS

I. INTRODUCTION

The Illinois Environmental Protection Agency ("Illinois EPA") submits this Statement of Reasons to the Illinois Pollution Control Board ("Board") pursuant to Sections 27 and 28 of the Environmental Protection Act ("Act") (415 ILCS 5/27 and 28) and 35 Ill. Adm. Code 102.202 in support of the attached proposal of regulations. These regulations are proposed to control nitrogen oxides emissions from various source categories, including emission units within these source categories such as industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steel making and aluminum melting, and fossil fuel-fired stationary boilers.

This proposed rulemaking is intended to meet certain obligations of the State of Illinois under the federal Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.*; specifically, to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of nitrogen oxides ("NO_x") in areas designated as nonattainment with respect to National Ambient Air Quality Standards ("NAAQS"). *See*, 42 U.S.C. §§ 7502 and 7511a. Illinois has formulated a thorough regulatory approach to comply with the State requirements under the CAA, and as such, is proposing reasonable and cost effective NO_x controls on various source categories. This NO_x control approach is congruent with rulemakings recently adopted and currently pending before the Board. See, R06-26, In the Matter of: Clean Air Interstate Rules (CAIR) SO₂, NO_x Annual and NO_x Ozone Season Trading Programs, 35 Ill. Adm. Code 225, Subparts A, C, D, E, and F, and R07-19, In the Matter of: Section 27 Proposed Rules for Nitrogen Oxide (NO_x) Emissions From Stationary Reciprocating Internal Combustion Engines and Turbines: Amendments to 35 Ill. Adm. Code Parts 211 and 217. Volatile organic compounds ("VOCs") and NO_x are the primary precursors to the formation of ozone. Additionally, NO_x is a precursor to the formation of PM_{2.5}.

Under Section 110 of the CAA and related provisions, states are required to submit, for the United States Environmental Protection Agency's ("USEPA") approval, SIPs that provide for the attainment and maintenance of standards established by USEPA through control programs directed to sources of the pollutants involved. 42 U.S.C. §7410. The CAA also provides for the State to address emissions sources on an area-specific basis through such requirements as reasonably available control measures ("RACM") and reasonably available control technology ("RACT"). *See*, 42 U.S.C. §§7502 and 7511a. For each nonattainment area, the CAA requires the State to demonstrate that it has adopted "all reasonably available control measures as expeditiously as possible (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." 42 U.S.C. § 7502(c)(1).

Included in this proposal are amendments to Part 217, Nitrogen Oxides Emissions, 35 Ill. Adm. Code Part 217, adding Subparts C, D, E, F, G, H, and M, and amendments to Part 211, Definitions and General Provisions, 35 Ill. Adm. Code 211.

II. STATEMENT OF FACTS

The CAA establishes a comprehensive program for controlling and improving the nation's air quality by way of state and federal regulations. USEPA is charged with identifying air pollutants that endanger the public health and welfare and with formulating the NAAQS that specify the maximum permissible concentrations of those pollutants in the ambient air under Sections 108 and 109 of the CAA. 42 U.S.C §§ 7408-7409.

A. 8-Hour Ozone NAAQS

Ozone is a gas composed of three atoms of oxygen. Ozone occurs both in the Earth's upper atmosphere and at ground level. Ground-level ozone is formed when NO_x and VOCs react in the atmosphere in the presence of sunlight. As stated above, NO_x and VOCs are ozone precursors.

On July 18, 1997, USEPA revised the NAAQS for ozone by replacing the 1-hour standard with an 8-hour standard. 62 *Fed. Reg.* 38856 (July 18, 1997). USEPA has identified volatile organic material (which is effectively the same material as VOCs) and NO_x as the primary precursors accountable for the formation of ozone. In Illinois, there are two areas designated as nonattainment (moderate) for the 8-hour ozone standard. The first is the Chicago-Gary-Lake County, IL-IN designated area, which includes Cook County, DuPage County, Grundy County (partial—Goose Lake and Aux Sable Townships), Kane County, Kendall County (partial—Oswego Township), Lake County, McHenry County, and Will County. The second area is the St. Louis, MO-IL designated area, which includes Jersey County, Madison County, Monroe County, and St. Clair County. 40 CFR §81.314.

B. PM_{2.5} NAAQS

Particulate matter is the generic term for a broad class of chemically and physically

diverse substances that exist as discrete particles (liquid droplets or solids) over a wide range of sizes. 62 *Fed. Reg.* 38653 (July 18, 1997). Particles originate from a variety of anthropogenic stationary and mobile sources as well as from natural sources. *Id.* Particles may be emitted directly or formed in the atmosphere by transformations of gaseous emissions such as sulfur oxides (SO_x), NO_x, and VOCs. *Id.* A regulatory focus on fine particles results in controls on gaseous precursors of fine particles such as SO_x, NO_x, and VOCs, which are all components of the complex mixture of air pollution that has most generally been associated with mortality and morbidity effects. *Id.* at 38667.

On July 18, 1997, USEPA revised the NAAQS for particulate matter to add new standards for fine particles, using PM_{2.5} as the indicator, and established primary annual and 24-hour standards for PM_{2.5}. 62 *Fed. Reg.* 38652 (July 18, 1997). PM_{2.5} refers to particulate matter that is 2.5 micrometers or smaller in size. In October 2006, USEPA subsequently completed another review of the NAAQS for particulate matter, and as a result, strengthened the 24-hour standard. 71 *Fed. Reg.* 61144 (October 17, 2006). USEPA issued final PM_{2.5} designations for areas violating the 1997 standards on December 17, 2004. Such designations were published in the Federal Register on January 5, 2005. 70 *Fed. Reg.* 944 (January 5, 2005). On April 5, 2005, USEPA issued a supplemental notice that changed the designation status of eight areas from nonattainment to attainment based upon updated air quality data. 70 *Fed. Reg.* 19844 (April 14, 2005).

In Illinois, there are two areas designated as nonattainment for the PM_{2.5} standard, the first being the Chicago-Gary-Lake County, IL-IN designated area, which includes Cook County, DuPage County, Grundy County (partial—Goose Lake and Aux Sable Townships), Kane County, Kendall County (partial—Oswego Township), Lake County, McHenry

County, and Will County, and second being the St. Louis, MO-IL designated area, which includes Madison County, Monroe County, Randolph County (partial—Baldwin Village), and St. Clair County. 40 CFR §81.314.

C. Clean Air Act Requirements

States are primarily responsible for ensuring attainment and maintenance of NAAQS once USEPA has established them. Under Section 110 of the CAA and related provisions, states are to submit, for USEPA approval, SIPs that provide for the attainment and maintenance of such standards through control programs directed to sources of the pollutants involved. 42 U.S.C. § 7410. Additional requirements include Section 172 of Subpart 1, Nonattainment Areas in General, and Section 182 of Subpart 2, Additional Provisions for Ozone Nonattainment Areas, under Part D, Plan Requirements for Nonattainment Areas.

III. PURPOSE AND EFFECT OF THE PROPOSAL

As discussed *supra*, this rulemaking proposal has been prepared to satisfy Illinois' obligation to submit a SIP to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of NO_x in areas designated as nonattainment with respect to the 8-hour ozone and $PM_{2.5}$ NAAQS.

USEPA designated two areas in Illinois as nonattainment for the 8-hour and $PM_{2.5}$ NAAQS, respectively. Such designations triggered requirements under the CAA for adopting regulations that reduce emissions sufficiently to demonstrate attainment of the standards. Under Section 172(c)(1), states with nonattainment areas are required to submit, in part, SIPs that provide for the adoption of RACM for stationary sources in all nonattainment areas as expeditiously as possible. 42 U.S.C. § 7502(c)(1). Section 172(c)(1) of the CAA provides, in relevant part, as follows:

(c) Nonattainment plan provisions

The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

(1) In general

Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

* * *

42 U.S.C. §7502(c)(1). A subset of RACM is the RACT requirements. RACT is defined as

the lowest emission limitation that a particular source can meet by applying a control

technique that is reasonably available considering technological and economic feasibility.

See, 44 Fed. Reg. 53762 (September 17, 1979). Section 182(b)(2) of the CAA requires states

to adopt RACT rules for all areas designated nonattainment for ozone and classified as

moderate or above. Section 182(b)(2) of the CAA states, in part, as follows:

(b) Moderate Areas

Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) of this section (relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

* * *

(2) Reasonably available control technology

The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 7502(c)(1) of this title with respect to each of the following:

(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between November 15, 1990, and the date of attainment.

- (B) All VOC sources in the area covered by any CTG issued before November 15, 1990.
- (C) All other major stationary sources of VOCs that are located in the area.

Each revision described in subparagraph (A) shall be submitted within the period set forth by the Administrator in issuing the relevant CTG document. The revisions with respect to sources described in subparagraphs (B) and (C) shall be submitted by 2 years after November 15, 1990, and shall provide for the implementation of the required measures as expeditiously as practicable but no later than May 31, 1995.

* * *

42 U.S.C. §7511a(b)(2). In addition, under Section 182(f) of the CAA, an overlapping requirement in each state in which all or part of a "moderate" area is located is the adoption of RACT for major NO_x sources. 42 U.S.C. § 7511a(f). Section 182(f) of the CAA states, in pertinent part, as follows:

- (f) NO x requirements
- (1) The plan provisions required under this subpart for major stationary sources of volatile organic compounds shall also apply to major stationary sources (as defined in section 7602 of this title and subsections (c), (d), and (e) of this section) of oxides of nitrogen. * * *

42 U.S.C. §7511a(f). Section 302 of the CAA defines "major stationary source" as any stationary facility or source of air pollutants that directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant. 42 U.S.C. §7602.

These sections of the CAA, taken together, establish the requirements for Illinois to submit NO_x RACT regulations for all major stationary sources of NO_x in PM_{2.5} nonattainment areas and ozone nonattainment areas classified as moderate and above. *See also, Clean Air Fine Particle Implementation Rule; Final Rule, 72 Fed. Reg.* 20586 (April 25, 2007), and *Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard; Final Rule, 70 Fed. Reg.* 71612 (November 29, 2005). Furthermore, states, such

as Illinois, with nonattainment areas classified as moderate or above for the 8-hour ozone NAAQS were required to submit by September 15, 2006, a SIP demonstrating that sources specified under the CAA were subject to RACT requirements. *See, Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard; Final Rule*, 70 *Fed. Reg.* 71612, 71652 (November 29, 2005). On March 24, 2008, USEPA made a finding that Illinois, among other states, failed to make a RACT submittal required under Part D of Title I of the CAA for its two moderate nonattainment areas. *See*, 73 *Fed. Reg.* 15416 (March 24, 2008). Such finding starts the 18-month emission offset sanctions clock and 24-month highway funding sanctions clock under Section 179(a) and (b) of the CAA and the 24-month clock for the promulgation by USEPA of a Federal Implementation Plan under Section 110(c) of the CAA. 42 U.S.C. §§ 7509(a) and (b) and 7410(c).

Accordingly, the Illinois EPA's regulatory proposal aims to achieve NO_x reductions in Illinois from a number of source categories while providing reasonable flexibility for the affected sources. The regulatory proposal requires major stationary sources located in the nonattainment areas in Illinois to comply with the emissions limitations set by the proposed rule beginning May 1, 2010. The emissions limitations apply on an ozone season basis and annual basis. Major stationary sources include those that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year. Also included under the applicability provisions of the proposed rule is any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season.

Flexibility is built into the regulations as they allow compliance to be demonstrated through an emissions averaging plan. Owners or operators of an affected source with certain emission units subject to the provisions of the proposed rule may demonstrate compliance through an emissions averaging plan. An emissions averaging plan can only address emission units that are located at one source and each unit may only be covered by one emissions averaging plan. Sources may therefore aggregate and then average the NO_x emissions from units at the same location in Illinois to comply with the emissions limitations.

In addition, the proposed regulations provide for certain exemptions. Such regulations do not apply to an emission unit operating under a federally enforceable limit of NO_x emissions from such unit to less than 15 tons per year and less than five tons per ozone season. In addition, the regulations do not apply to a coal-fired stationary boiler that commenced operation before January 1, 2008, that is complying with the multi-pollutant standard under Section 225.233 of Part 225 or the combined pollutant standards under Subpart F of Part 225 (i.e., control requirements and standards for emissions of mercury, NO_x and SO_2).

As to monitoring, the proposed regulations mandate that owners of certain large emission units comply with the monitoring provisions of Part 75 of the *Code of Federal Regulations*, 40 CFR Part 75, with regard to monitoring emissions of NO_x to the atmosphere, while owners of certain smaller emission units are required to comply with the monitoring provisions of Part 60 of the *Code of Federal Regulations*, 40 CFR Part 60. Performance testing requirements exist for small emission units; however, the option of complying with continuous emissions monitoring system requirements under Part 60 is available. In

addition, provisions are set forth pertaining to recordkeeping and reporting requirements. A section-by-section summary of the Illinois EPA's regulatory proposal is set forth *infra*.

IV. GEOGRAPHIC REGIONS AND SOURCES AFFECTED

The geographic regions subject to the proposed regulations for affected sources are the two areas designated as nonattainment for the 8-hour ozone and PM2.5 standards that collectively comprise the Chicago-Gary-Lake County, IL-IN designated area, which includes Cook County, DuPage County, Grundy County (partial-Goose Lake and Aux Sable Townships), Kane County, Kendall County (partial-Oswego Township), Lake County, McHenry County, and Will County, and the St. Louis, MO-IL designated area, which includes Jersey County, Madison County, Monroe County, Randolph County (partial-Baldwin Village), and St. Clair County. 40 CFR §81.314. The proposed regulations are expected to affect existing and new units. Existing units in the nonattainment areas in Illinois that will be subject to the proposed regulations include 80 industrial boilers, 84 process heaters, four glass melting furnaces, two lime kilns, six furnaces used in iron and steel making, and 20 fossil fuel-fired stationary boilers. There are currently no cement kilns or aluminum melting furnaces in operation in such nonattainment areas. The sources expected to be affected by the proposed rulemaking are set forth in Attachment A to the Technical Support Document for Control of Nitrogen Oxide Emissions from Industrial, Commercial, and Institutional (ICI) Boilers and Small Electric Generating Unit (EGU) Boilers, Process Heaters, Cement Kilns, Lime Kilns, Reheat, Annealing, and Galvanizing Furnaces used at Iron and Steel Plants, Glass Melting Furnaces, and Aluminum Melting Furnaces, AQPSTR 07-02, March 2008, Prepared by Andover Technology Partners and the Illinois EPA.

The proposed regulations are generally expected to affect all sources that are located in those nonattainment areas that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year and any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler within such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season and subject to the provisions of the proposed regulations.

V. TECHNICAL FEASIBILITY AND ECONOMIC REASONABLENESS

The technology for controlling nitrogen oxide emissions is readily available. *See*, *Technical Support Document*. The proposed rule is expected to reduce NO_x emissions by 46.3% or 20,666 tons per year beginning in 2010. *Id*. The Illinois EPA has concluded that affected sources can meet the requirements of the proposed rule through a number of control techniques such that compliance is both technically feasible and economically reasonable. *Id*.

With regard to industrial boilers and process heaters, control techniques for reducing NOx emissions include combustion modification controls, flue gas treatment controls, or a combination of these technologies. *Id.* at 19 and 55. Combustion modification controls such as combustion tuning, low excess air firing, staged combustion air, low NO_x burners, ultra low NO_x burners, and flue gas recirculation modify the conditions under which combustion occurs to reduce NO_x formation. *Id.* Post-combustion controls, such as selective catalytic reduction and selective non-catalytic reduction, reduce NO_x emissions after it is formed. *Id.*

As to cement kilns, lime kilns, and reheat, annealing, and galvanizing furnaces at iron and steel plants, NO_x control approaches applicable to these industries may be grouped into combustion control approaches where the emphasis is on reducing NO_x formation and postcombustion control approaches that destroy the NO_x formed in the combustion process. *Id.* at 71, 88, and 95. The *Technical Support Document* illustrates in detail these control approaches. *Id.*

With regard to glass melting furnaces, NO_x control approaches may be grouped into combustion and post-combustion control approaches. Combustion modifications place the emphasis on reducing NO_x formation, process modifications such as preheating of cullet, use of electric boost, and addition of feed nitrate. Post-combustion control approaches destroy the NO_x formed in the combustion process. *Id.* at 105. The *Technical Support Document* further illustrates these control approaches in detail. *Id.*

As to aluminum melting furnaces, NO_x control approaches include combustion control approaches where the emphasis is on reducing NO_x formation and post-combustion control approaches that destroy the NO_x formed in the combustion process. *Id.* at 121. The *Technical Support Document* further details these control approaches. *Id.* Furthermore, the emissions limitations proposed in this rulemaking are consistent with rules promulgated in other jurisdictions. The South Coast Air Quality Management District and the State of Ohio have regulatory requirements for affected emission units. *Id.* at 124-25.

There are a number of control options available to achieve the control levels set forth in this regulatory proposal. The Illinois EPA's analysis, explained in detail in the *Technical Support Document* and supporting documentation, demonstrates the technical feasibility and economic reasonableness of this proposed rulemaking.

VI. COMMUNICATION WITH INTERESTED PARTIES

Illinois EPA engaged in outreach on this proposal. On July 31, 2007, the Illinois EPA posted a draft of the proposed rule on its website for public comment. Illinois EPA also stated its willingness to meet individually with any interested party.

Illinois EPA received extensive comments on the draft rule, and this proposal incorporates many of the concerns and suggestions put forth in these comments. Such comments can generally be categorized into the following areas: applicability, compliance date, emission limit averaging time, exemptions, testing and monitoring, emission limits, and case-by-case RACT determinations. These regulations are being proposed after the interested parties have had an opportunity to review the proposal and discuss any issues with Illinois EPA.

VII. SYNOPSIS OF TESTIMONY

The Illinois EPA plans to call Rob Kaleel, Manager, Air Quality Planning Section ("AQPS"), Bureau of Air, Illinois EPA, Vir Gupta, Environmental Protection Engineer IV, AQPS, Bureau of Air, Illinois EPA, and James E. Staudt, Ph.D., CFA, Andover Technology Partners, as witnesses at hearing. The witnesses will testify about the proposed amendments in general and will assist in answering questions. Written testimony will be submitted prior to hearing in accordance with the Board's procedural rules.

VIII. THE ILLINOIS EPA'S PROPOSAL

The following is a Section-by-Section summary of the Illinois EPA's proposal.

<u>35 Ill. Adm. Code 211</u>

Subpart B: Definitions

The Illinois EPA is proposing to add definitions to Part 211.

Section 211.665 <u>Auxiliary Boiler</u>

The Illinois EPA is proposing to add a definition for auxiliary boiler. Such definition is necessary for Subparts C and D.

Section 211.995 Circulating Fluidized Bed Combustor

The Illinois EPA is proposing to add a definition for circulating fluidized bed combustor. Such definition is necessary for Subpart D.

Section 211.1315 Combustion Tuning

The Illinois EPA is proposing to add a definition for combustion tuning. Such definition is necessary for Subparts D and E.

Section 211.1435 Container Glass

The Illinois EPA is proposing to add a definition for container glass. Such definition is necessary for Subpart F.

Section 211.2355 Flare

The Illinois EPA is proposing to add a definition for the term flare. Such definition is required because flares are not subject to the NO_x general requirements under Subpart C.

Section 211.2357 Flat Glass

The Illinois EPA is proposing to add a definition for flat glass. Such definition is necessary for Subpart F.

Section 211.2625 Glass Melting Furnace

The Illinois EPA is proposing to add a definition for glass melting furnace. Such definition is necessary for applicability under Subpart F.

Section 211.3100 Industrial Boiler

The Illinois EPA is proposing to add a definition for industrial boiler. Such definition is necessary for applicability under Subpart D.

Section 211.3355 Lime Kiln

The Illinois EPA is proposing to add a definition for lime kiln. Such definition is necessary for Subpart G.

Section 211.3475 Load Shaving Unit

The Illinois EPA is proposing to add a definition for load shaving unit, because the term is included in the definition of auxiliary boiler.

Section 211.4280 Other Glass

The Illinois EPA is proposing to add a definition for other glass. Such definition is necessary for Subpart F.

Section 211.5195 Process Heater

The Illinois EPA is proposing to add a definition for process heater. Such definition is necessary for Subpart E.

35 Ill. Adm. Code 217

Subpart A: General Provisions

Section 217.100 Scope and Organization

The Illinois EPA is proposing to amend subsection (b) of this Section to state that permits for sources subject to Part 217 may be required under Section 39.5 of the Act, in addition to 35 Ill. Adm. Code Part 201.

Section 217.104 Incorporations by Reference

The Illinois EPA is proposing to add test methods under 40 CFR Part 60 and Alternative Control Techniques Documents.

Section 217.121 New Emission Sources

The Illinois EPA is proposing to repeal this Section.

Subpart B: Existing Fuel Combustion Emission Sources

Section 217.141 Existing Emission Sources in Major Metropolitan Areas

The Illinois EPA proposes to amend this Section by changing the term "source" to "unit" and also state that the Section does not apply to emission units that are subject to the emissions limitations of Subpart D, E, F, G, H, M, or Q of Part 217.

Subpart C: NO_x General Requirements

Section 217.150 Applicability

This Section addresses the applicability of proposed new Subparts C, D, E, F, G, H, and M of Part 217. Subsection (a) provides that Subparts C, D, E, F, G, H, and M of Part 217 apply to all sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) The area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County; or (B) The area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County. Subsection (a) also provides that Subparts C, D, E, F, G, H, and M of Part 217 apply to any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season.

Subsection (b) provides that if a source ceases to fulfill the emissions criteria of subsection (a) of this Section, the requirements of Subpart D, E, F, G, H, or M of Part 217 continue to apply to any emission unit that was ever subject to the provisions of Subpart D, E, F, G, H, or M or Part 217. Subsection (c) provides that the provisions of Subpart C do not apply to afterburners, flares, and incinerators.

Subsection (d) provides that where a construction permit, for which the application was submitted to the Agency prior to the adoption of Subpart C, is issued that relies on decreases in emissions of NO_x from existing emission units for purposes of netting or emission offsets, such NO_x decreases remain creditable notwithstanding any requirements that may apply to the existing emission units pursuant to Subpart C and Subpart D, E, F, G, H, or \dot{M} of Part 217.

Section 217.152 Compliance Date

Subsection (a) provides that compliance with the requirements of Subparts D, E, F, G, H, and M by an owner or operator of an emission unit that is subject to any one of those subparts is required beginning May 1, 2010. Subsection (b) provides that the first annual compliance period is May 1, 2010, through April 30, 2011, and then on a calendar year basis thereafter. In addition, the owner or operator of an emission unit that is subject to Subpart D, E, F, G, H, or M must operate such unit in a manner consistent with good air pollution control practice to minimize NO_x emissions.

Section 217.154 Performance Testing

This Section specifies the performance testing requirements for emission units subject to Subpart D, E, F, G, or H of Part 217. Subsection (a) states that such testing for emission units constructed on or before December 1, 2009, and subject to one of those subparts must be conducted in accordance with Section 217.157 (Testing and Monitoring) of Subpart C. However, subsection (a) does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system.

Subsection (b) provides that performance testing of NO_x emissions for emission units constructed or modified after December 1, 2009, and subject to one of those subparts must be conducted within 60 days of achieving maximum operating rate but no later than 180 days after initial startup of the new or modified emission unit, in accordance with Section 217.157 (Testing and Monitoring) of Subpart C. Subsection (b), however, does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system.

Subsection (c) provides that notification of the initial startup of an emission unit subject to subsection (b) of this Section must be provided to the Agency no later than 30 days after initial startup. Subsection (d) states that the owner or operator of an emission unit subject to subsection (a) or (b) of this Section must notify the Agency of the scheduled date for the performance testing at least 30 days in writing before such date and five days before such date.

Subsection (e) provides that if demonstrating compliance through an emissions averaging plan, at least 30 days before changing the method of compliance, the owner or operator of an emission unit must submit a written notification to the Agency describing the

new method of compliance, the reason for the change in the method of compliance, and the scheduled date for the compliance demonstration testing, if required. This subsection also provides that upon changing the method of compliance, the owner or operator of an emission unit must submit to the Agency a revised compliance certification that meets the requirements of Section 217.155 of Subpart C.

Section 217.155 Initial Compliance Certification

This Section sets forth the requirements for owners or operators of an emission unit subject to proposed new Subpart D, E, F, G, H, or M of Part 217 pertaining to initial compliance certifications. Subsection (a) states that by May 1, 2010, an owner or operator of an emission unit subject to Subpart D, E, F, G, or H of Part 217 who is not demonstrating compliance through the use of a continuous emissions monitoring system must certify to the Agency that the emission unit will be in compliance with the applicable emissions limitation of Subpart D, E, F, G, or H of Part 217 beginning May 1, 2010. Such performance testing certification must include the results of the performance testing performed in accordance with Sections 217.154(a) and (b) of Subpart C and the calculations necessary to demonstrate that the subject emission unit will be in initial compliance.

Subsection (b) provides that by May 1, 2010, an owner or operator of an emission unit subject to Subpart D, E, F, G, H, or M of Part 217 who is demonstrating compliance through a continuous emissions monitoring system must certify to the Agency that the affected emission units will be in compliance with the applicable emissions limitation of Subpart D, E, F, G, or H of Part 217 beginning May 1, 2010. Such compliance certification must include a certification of the installation and operation of a continuous emissions monitoring system required under Section 217.157 of Subpart C and the monitoring data

necessary to demonstrate that the subject emission unit will be in initial compliance.

Section 217.156 Record keeping and Reporting

This Section contains the recordkeeping and reporting requirements for the owner or operator of a source subject to proposed new Subpart D, E, F, G, H, or M of Part 217. Subsection (a) provides that the owner or operator of a source subject to Subpart D, E, F, G, H, or M must keep and maintain all records used to demonstrate initial compliance and ongoing compliance with the requirements of those Subparts. This subsection also provides that except as otherwise provided under those Subparts, copies of such records must be submitted by the owner or operator of the source to the Agency within 30 days after receipt of a written request by the Agency, and such records must be kept a the source and maintained for at least five years and must be available for inspection and copying by the Agency.

Subsection (b) states that the owner or operator of an emission unit subject to Subpart D, E, F, G, H, or M must maintain the following records that demonstrate compliance with the applicable subpart: (1) Identification, type (e.g., gas-fired), and location of each unit; (2) Calendar date of record; (3) Monthly, seasonal, and annual operating hours; (4) Type and quantity of each fuel used monthly, seasonally, and annually; (5) Product and material throughput, as applicable; (6) Reports for all applicable emissions tests for NO_x conducted on the unit, including results; (7) The date, time, and duration of any startup, shutdown, or malfunction in the operation of any emission unit subject to Subpart D, E, F, G, H, or M or any emissions monitoring equipment, and the records must include a description of the malfunction and corrective maintenance activity; (8) A log of all maintenance and inspections related to the unit's air pollution control equipment for NO_x that is performed on

the unit; (9) A log for the NO_x monitoring device, if present, including periods when not in service and maintenance and inspection activities that are performed on the device; (10) Identification of time periods for which operating conditions and pollutant data were not obtained by the continuous emissions monitoring system including the reasons for not obtaining sufficient data and a description of corrective actions taken; and (11) If complying with the emissions averaging plan provisions of Section 217.158 of Subpart C, copies of the calculations used to demonstrate compliance with the ozone season and annual control period limitations, noncompliance reports for the ozone season, and ozone and annual control period compliance reports submitted to the Agency.

Subsection (c) provides that the owner or operator of an industrial boiler subject to Subpart D must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section 217.166, and subsection (d) provides that the owner or operator of a process heater subject to Subpart E must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section 217.186. Subsection (e) states that the owner or operator of an emission unit subject to Subpart D, E, F, G, H, or M must maintain records in order to demonstrate compliance with the testing and monitoring requirements under Section 217.157.

Subsection (f) states that the owner or operator of an emission unit subject to Subpart D, E, F, G, or H must provide the following submissions with respect to performance testing pursuant to Section 217.157(a)(4) or (b)(2): (1) Submit a testing protocol to the Agency at least 60 days prior to testing; (2) Notify the Agency at least 30 days in writing prior to conducting performance testing for NO_x emissions and five days prior to such testing; (3) Not later than 60 days after the completion of the test, submit the results of the test to the
Agency; and (4) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay (e.g., due to operational problems) in conducting the test as scheduled, the owner or operator of the unit must notify the Agency as soon as practicable of the delay in the original test date, either by providing at least seven days' prior notice of the rescheduled date of the test or by arranging a new test date with the Agency by mutual agreement.

Subsection (g) provides that the owner or operator of an emission unit subject to Subpart D, E, F, G, H, or M must notify the Agency of any exceedances of an applicable emissions limitation of Subpart D, E, F, G, H, or M by sending the applicable report with an explanation of the causes of such exceedances to the Agency within 30 days following the end of the applicable compliance period in which the emissions limitation was not met. Subsection (h) provides that within 30 days of the receipt of a written request by the Agency, the owner or operator of an emission unit that is exempt from the requirements of Subpart D, E, F, G, H, or M must submit records that document that the emission unit is exempt from those requirements to the Agency.

Subsection (i) states that if demonstrating compliance through an emissions averaging plan, by March 1 following the applicable calendar year, the owner or operator must submit to the Agency a report that demonstrates the following: (1) For all units that are part of the emissions averaging plan, the total mass of allowable NO_x emissions for the ozone season and for the annual control period; (2) The total mass of actual NO_x emissions for the ozone season and annual control period for each unit included in the averaging plan; and (3) The calculations that demonstrate that the total mass of actual NO_x emissions are less than the total mass of allowable NO_x emissions are less than the information required to determine the total mass of actual NO_x emissions.

Subsection (j) provides that the owner or operator of an emission unit subject to Subpart D, E, F, G, H, or M and demonstrating compliance through the use of a continuous emissions monitoring system must submit to the Agency a report within 30 days after the end of each calendar quarter. This report must include the following: (1) Information identifying and explaining the times and dates when continuous emission monitoring for NO_x was not in operation, other than for purposes of calibrating or performing quality assurance or quality control activities for the monitoring equipment; and (2) An excess emissions and monitoring systems performance report in accordance with the requirements of 40 CFR 60.7(c) and (d) and 60.13, or 40 CFR Part 75, or an alternate procedure approved by the Agency and USEPA. Subsection (k) states that the owner or operator of an emission unit subject to Subpart M must comply with the compliance certification and recordkeeping and reporting requirements in accordance with 40 CFR 96, or an alternate procedure approved by the Agency and USEPA.

Section 217.157 Testing and Monitoring

This Section sets forth the testing and monitoring requirements that apply to owners or operators of emission units subject to Subpart D, E, F, G, H, or M. Subsection (a) includes the provisions applicable to owners and operators of industrial boilers subject to Subpart D and process heaters subject to Subpart E. Subsection (a)(1) provides that the owner or operator of an industrial boiler subject to Subpart D with a rated heat input capacity greater than 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR Part 75.

Subsection (a)(2) provides that the owner or operator of an industrial boiler subject to Subpart D with a rated heat input capacity greater than 100 mmBtu/hr but less than or equal to 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR Part 60, Subpart A, and Appendix B, Performance Specifications 2 and 3, and Appendix F, Quality Assurance Procedures.

Subsection (a)(3) states that the owner or operator of a process heater subject to Subpart E with a rated heat input capacity greater than 100 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, Subpart A, and Appendix B, Performance Specifications 2 and 3, and Appendix F, Quality Assurance Procedures.

Subsection (a)(4) provides that, if demonstrating compliance through an emissions averaging plan, the owner or operator of an industrial boiler subject to Subpart D, or a process heater subject to Subpart E, with a rated heat input capacity less than or equal to 100 mmBtu/hr and not demonstrating compliance through a continuous emissions monitoring system must have an initial performance test conducted pursuant to subsection (a)(4)(B) of this Section and Section 217.154. Subsection (a)(4)(A) sets forth the time frames when subsequent performance tests are required to be conducted. Subsection (a)(4)(B) provides that the owner or operator of an industrial boiler or process heater must conduct a performance test using 40 CFR Part 60, Subpart A, and Appendix A, Method 1, 2, 3, 4, 7E, or 19. This subsection also sets forth the requirements for such performance tests. Subsection (a)(5) states that instead of complying with the requirements of subsections (a)(4), (a)(4)(A), and (a)(4)(B) of this Section, an owner or operator of an industrial boiler subject to Subpart D of this Part, or a process heater subject to Subpart E of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr may install and operate a continuous emissions monitoring system on such emission unit that meets the applicable requirements of 40 CFR Part 60, Subpart A, and Appendix B, Performance Specifications 2 and 3, and Appendix F, Quality Assurance Procedures. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

Subsection (a)(6) provides that, notwithstanding subsection (a)(2) of this Section, the owner or operator of an auxiliary boiler subject to Subpart D of this Part with a rated heat input capacity less than or equal to 250 mmBtu/hr and a capacity factor of less than or equal to 20% is not required to install, calibrate, maintain, and operate a continuous emissions monitoring system on such boiler for the measurement of NO_x emissions discharged into the atmosphere, but must comply with the performance test requirements under subsections (a)(4), (a)(4)(A), and (a)(4)(B) of this Section.

Subsection (b) includes the provisions applicable to owners and operators of glass melting furnaces subject to Subpart F, cement and lime kilns subject to Subpart G, iron and steel reheat, annealing, or galvanizing furnaces subject to Subpart H, and aluminum reverberatory and crucible furnaces subject to Subpart H. Subsection (b)(1) states that an owner or operator of such an emission unit that has the potential to emit NO_x in an amount equal to or greater than one ton per day must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x

emissions discharged into the atmosphere in accordance with 40 CFR Part 60, Subpart A, and Appendix B, Performance Specifications 2 and 3, and Appendix F, Quality Assurance Procedures.

Subsection (b)(2) provides that an owner or operator of a glass melting furnace, cement kiln or lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace that has the potential to emit NO_x in an amount less than one ton per day must have an initial performance test conducted pursuant to subsection (b)(4) of this Section and Section 217.154. Subsection (b)(3) sets forth the time frames when subsequent performance tests are required to be conducted.

Subsection (b)(4) sets forth the test methods that are required to be utilized in conducting performance tests. This subsection also sets forth the requirements for such performance tests.

Subsection (b)(5) states that instead of complying with the requirements of subsections (b)(2), (b)(3), and (b)(4) of this Section, an owner or operator of a glass melting furnace, cement kiln or lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace that has the potential to emit NO_x in an amount less than one ton per day may install and operate a continuous emissions monitoring system on such emission unit that meets the applicable requirements of 40 CFR Part 60, Subpart A, and Appendix B, Performance Specifications 2 and 3, and Appendix F, Quality Assurance Procedures. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

Subsection (c) provides that owner or operator of a fossil fuel-fired stationary boiler subject to Subpart M must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR Part 96, Subpart H. Subsection (d) states that if two or more emission units subject to Subpart D, E, F, G, H, M, or Q are served by a common stack and the owner or operator of such emission units is operating a continuous emissions monitoring system, the owner or operator may, with written approval from the Agency, utilize a single continuous emissions monitoring system for the combination of emission units subject to Subpart D, E, F, G, H, M, or Q that share the common stack, provided such emission units are subject to an emissions averaging plan under this Part.

Section 217.158 Emissions Averaging Plans

This Section sets forth the provisions pertaining to emissions averaging plans. Subsection (a) provides that notwithstanding any other emissions averaging plan provisions under Part 217, an owner or operator of a source with certain emission units subject to Subpart D, E, F, G, H, or M, or subject to Subpart Q that are located in either one of the areas set forth under Section 217.150(a)(1)(A) or (B), may demonstrate compliance with the applicable subpart through an emissions averaging plan. An emissions averaging plan can only address emission units that are located at one source and each unit may only be covered by one emissions averaging plan. Such emission units at the source are affected units and are subject to the requirements set forth under this Section.

Subsection (a)(1) provides that the following units may be included in an emissions averaging plan: (A) Units that commenced operation on or before January 1, 2002; (B) Units that the owner or operator may claim as exempt under Subpart D, E, F, G, H, or M, as

applicable, but does not claim exempt; and (C) Units that commence operation after January 1, 2002, if the unit replaces a unit that commenced operation on or before January 1, 2002, or it replaces a unit that replaced a unit that commenced operation on or before January 1, 2002. Subsection (a)(2) also sets forth the following types of units that may not be included in an emissions averaging plan: (A) Units that commence operation after January 1, 2002, except as provided by subsection (a)(1)(C) of this Section; (B) Units that the owner or operator is claiming are exempt under Subpart D, E, F, G, H, or M, as applicable; and (3) Units that are required to meet emission limits for NO_x as provided for in an enforceable order, unless such order specifically provides for operation pursuant to an emissions averaging plan.

Subsection (b) provides that an owner or operator must submit an emissions averaging plan to the Agency by May 1, 2010, and such plan must include, but is not limited to, the list of affected units included in the plan by unit identification number and a sample calculation demonstrating compliance using the methodology provided in subsection (f) of this Section for the ozone season (May 1 through September 30) and calendar year (January 1 through December 31).

Subsection (c) states that an owner or operator may amend an emissions averaging plan only once per calendar year. Such an amended plan must be submitted to the Agency by May 1 of the applicable calendar year. If an amended plan is not received by the Agency by May 1 of the applicable calendar year, the previous year's plan will be the applicable emissions averaging plan.

Subsection (d) provides that, notwithstanding subsection (c) of this Section, if a unit that is listed in an emissions averaging plan is taken out of service, the owner or operator must submit to the Agency, within 30 days of such occurrence, an updated emissions

averaging plan; or if a unit that is exempt from the requirements of Subpart D, E, F, G, H, or M, as applicable, no longer qualifies for an exemption, the owner or operator may amend its existing averaging plan to include such unit within 30 days of the unit no longer qualifying for the exemption.

Subsection (e) states that an owner or operator must (1) demonstrate compliance for the ozone season (May 1 through September 30) and the calendar year (January 1 through December 31) by using the methodology and the units listed in the most recent emissions averaging plan submitted to the Agency pursuant to subsection (b) of this Section, the higher of the monitoring data or test data determined pursuant to Section 217.157, and the actual hours of operation for the applicable averaging plan period; and (2) submit to the Agency by March 1 following each calendar year, a compliance report containing the information required by Section 217.156(i).

Subsection (f) provides that the total mass of actual NO_x emissions from the units listed in the emissions averaging plan must be equal to or less than the total mass of allowable NO_x emissions for those units for both the ozone season and calendar year. This subsection also includes the equations to be used to determine compliance.

Subsection (g) states that the owner or operator of an emission unit subject to Subpart Q of this Part that is located in either one of the areas set forth under Section 217.150(a)(1)(A) or (B) of this Subpart that is complying through an emissions averaging plan under this Section must comply with the applicable provisions for determining actual and allowable emissions under Section 217.390 of Subpart Q, the testing and monitoring requirements under Section 217.394 of Subpart Q, and the recordkeeping and reporting requirements under Section 217.396 of Subpart Q.

Subpart D: Industrial Boilers

Section 217.160 Applicability

This Section under subsection (a) states that the provisions of Subparts C and D apply to all industrial boilers located at sources subject to Subpart D pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season). Subsection (b) states that the provisions of Subpart D do not apply to boilers serving a generator that has a nameplate capacity of 25 MWe or less and produces electricity for sale, and cogeneration units, as that term is defined in Section 225.130 of Part 225, if such boilers or cogeneration units are subject to the CAIR NO_x Trading Programs under Subpart D or E of Part 225. Subsection (c) provides that the provisions of Subpart D do not apply to fluidized catalytic cracking units, their regenerator and associated CO boiler or boilers and CO furnace or furnaces where present, that commenced operation prior to January 1, 2008, if such units are located at a petroleum

refinery and such units are required to meet emission limits for NO_x as provided for in an enforceable order.

Section 217.162 Exemptions

This Section sets forth the types of industrial boilers that are exempt from the provisions of Subpart D. Such exemption includes an industrial boiler operating under a federally enforceable limit of NO_x emissions from such boiler to less than 15 tons per year and less than five tons per ozone season.

Section 217.164 Emissions Limitations

This Section sets forth the emissions limitations or other requirement applicable to industrial boilers subject to Subpart D. On and after May 1, 2010, no person shall cause or allow emissions of NO_x into the atmosphere from any industrial boiler to exceed the limitations set forth under this Section. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Section 217.165 Combination of Fuels

This Section states that the owner or operator of an industrial boiler subject to Subpart D and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section 217.164.

Section 217.166 Methods and Procedures for Combustion Tuning

This Section specifies that the owner or operator of an industrial boiler subject to the combustion tuning requirements of Section 217.164 must have combustion tuning performed on the boiler at least annually. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of boilers firing the fuel or fuels that are fired in the boiler. The owner or

operator must maintain the following records that must be made available to the Agency upon request: (1) The date the combustion tuning was performed; (2) The name, title, and affiliation of the person who performed the combustion tuning; (3) Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course; (4) Tune-up procedure and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and (5) Operating parameters recorded at the start and at conclusion of combustion tuning.

Subpart E: Process Heaters

Section 217.180 Applicability

This Section states that the provisions of Subparts C and E apply to all process heaters located at sources subject to Subpart E pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season).

Section 217.182 Exemptions

This Section sets forth the types of process heaters that are exempt from the provisions of Subpart E. Such exemption includes a process heater operating under a federally enforceable limit of nitrogen oxide emissions from such heater to less than 15 tons per year and less than five tons per ozone season.

Section 217.184 Emissions Limitations

This Section sets forth the emissions limitations or other requirement applicable to process heaters subject to Subpart E. On and after May 1, 2010, no person shall cause or allow emissions of nitrogen oxides into the atmosphere from any process heater to exceed the limitations set forth under this Section. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Section 217.185 Combination of Fuels

This Section states that the owner or operator of a process heater subject to Subpart E and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section 217.184.

Section 217.186 Methods and Procedures for Combustion Tuning

This Section specifies that the owner or operator of a process heater subject to the combustion tuning requirements of Section 217.184 must have combustion tuning performed on the heater at least annually. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of heaters firing the fuel or fuels that are fired in the heater. The owner or operator must maintain the following records that must be made available to the Agency upon request: (1) The date the combustion tuning was performed; (2) The name, title, and

affiliation of the person who performed the combustion tuning; (3) Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course; (4) Tune-up procedure and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and (5) Operating parameters recorded at the start and at conclusion of combustion tuning.

Subpart F: Glass Melting Furnaces

Section 217.200 Applicability

This Section states that the provisions of Subparts C and F apply to all glass melting furnaces located at sources subject to Subpart F pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season).

Section 217.202 Exemptions

This Section sets forth the types of glass melting furnaces that are exempt from the provisions of Subpart F. Such exemption includes a glass melting furnace operating under a federally enforceable limit of nitrogen oxide emissions from such furnace to less than 15 tons per year and less than five tons per ozone season.

Section 217.204 Emissions Limitations

This Section sets forth the emissions limitations applicable to glass melting furnaces subject to Subpart F. On and after May 1, 2010, no person shall cause or allow emissions of nitrogen oxides into the atmosphere from any glass melting furnace to exceed the limitations set forth under this Section. Compliance must be demonstrated with the emissions limitations on an ozone season and annual basis.

Subpart G: Cement and Lime Kilns

Section 217.220 Applicability

This Section states that the provisions of Subparts C and G apply to all cement kilns, notwithstanding Subpart T of Part 217, and all lime kilns located at sources subject to Subpart G pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or

galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season).

Section 217.222 Exemptions

This Section sets forth the types of cement kilns and lime kilns that are exempt from the provisions of Subpart G. Such exemption includes a cement kiln or lime kiln operating under a federally enforceable limit of nitrogen oxide emissions from such kiln to less than 15 tons per year and less than five tons per ozone season.

Section 217.224 Emissions Limitations

This Section sets forth the emissions limitations applicable to cement kilns and lime kilns subject to Subpart G. On and after May 1, 2010, no person shall cause or allow emissions of nitrogen oxides into the atmosphere from any such kiln to exceed the limitations set forth under this Section. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Subpart H: Iron and Steel and Aluminum Manufacturing

Section 217.240 Applicability

This Section states that the provisions of Subparts C and H apply to all reheat, annealing, and galvanizing furnaces used in iron and steel making and all reverberatory and crucible furnaces used in aluminum melting located at sources subject to Subpart H pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in

Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season).

Section 217.242 Exemptions

This Section sets forth the types of furnaces that are exempt from the provisions of Subpart H. Such exemption includes an iron and steel reheat, annealing, or galvanizing furnace or aluminum reverberatory or crucible furnace operating under a federally enforceable limit of nitrogen oxide emissions from such kiln to less than 15 tons per year and less than five tons per ozone season.

Section 217.244 Emissions Limitations

This Section sets forth the emissions limitations applicable to furnaces subject to Subpart H. On and after May 1, 2010, no person shall cause or allow emissions of nitrogen oxides into the atmosphere from any such furnace to exceed the limitations set forth under this Section. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Subpart M: Electrical Generating Units

Section 217.340 Applicability

This Section states that, notwithstanding Subpart V or W of Part 217, the provisions of Subparts C and M apply to all fossil fuel-fired stationary boilers subject to the CAIR NO_x

Trading Programs under Subpart D or E of Part 225 located at sources subject to Subpart M pursuant to Section 217.150 of Part 217 (i.e., (1) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year: (A) the area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County or (B) the area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and (2) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season).

Section 217.342 Exemptions

This Section sets forth the types of stationary boilers that are exempt from the provisions of Subpart M. Such exemptions include a fossil fuel-fired stationary boiler operating under a federally enforceable limit of nitrogen oxide emissions from such boiler to less than 15 tons per year and less than five tons per ozone season and a coal-fired stationary boiler that commenced operation before January 1, 2008, that is complying with the multi-pollutant standard under Section 225.233 of Part 225 or the combined pollutant standards under Subpart F of Part 225.

Section 217.344 Emissions Limitations

This Section sets forth the emissions limitations applicable to fossil fuel-fired stationary boilers subject to Subpart M. On and after May 1, 2010, no person shall cause or

allow emissions of nitrogen oxides into the atmosphere from any such boiler to exceed the limitations set forth under this Section. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Section 217.345 Combination of Fuels

This Section states that the owner or operator of a fossil fuel-fired stationary boiler subject to Subpart M and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section 217.344.

IX. CONCLUSION

For the reasons stated above, the Illinois EPA hereby submits this regulatory proposal and requests the Board to adopt these rules for the State of Illinois.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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Ğina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: May 8, 2008

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

| STATE OF ILLINOIS |) | |
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| COUNTY OF SANGAMON |) | |
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CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state that I have served the attached **<u>RULEMAKING</u>**

PROPOSAL entitled "AMENDMENTS TO 35 ILL. ADM. CODE 217, NITROGEN OXIDES

EMISSIONS, AND 35 ILL. ADM. CODE 211," MOTION FOR WAIVER OF COPY

REQUIREMENTS, AND APPEARANCES upon the person to whom it is directed, by placing a

copy in an envelope addressed to:

John Therriault Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St., Suite 11-500 Chicago, IL 60601-3218 (First Class Mail)

Virginia Yang Deputy Counsel Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702 (First Class Mail) Matthew Dunn Chief Division of Environmental Enforcement Office of the Attorney General 69 W. Washington St., Suite 1800 Chicago, IL 60602 (First Class Mail)

and mailing it from Springfield, Illinois, with sufficient postage affixed, as indicated above.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

4. Abecaforte

Gina Roccaforte Assistant Counsel Division of Legal Counsel

Dated: May 8, 2008

1021 North Grand Avenue East Springfield, Illinois 62794-9276 (217) 782-5544